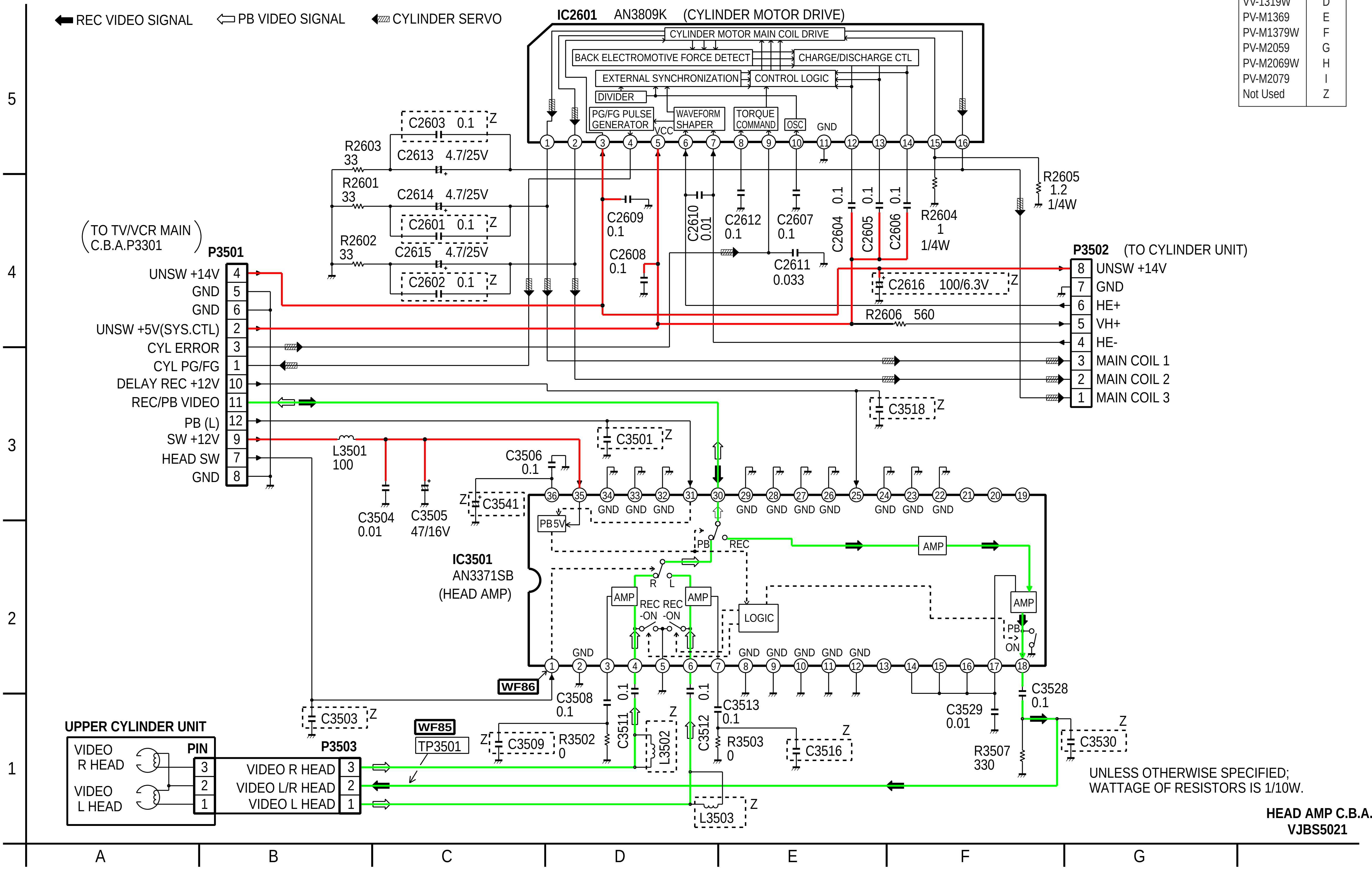
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I
Not Used	Z



UNLESS OTHERWISE SPECIFIED; WATTAGE OF RESISTORS IS 1/10W.

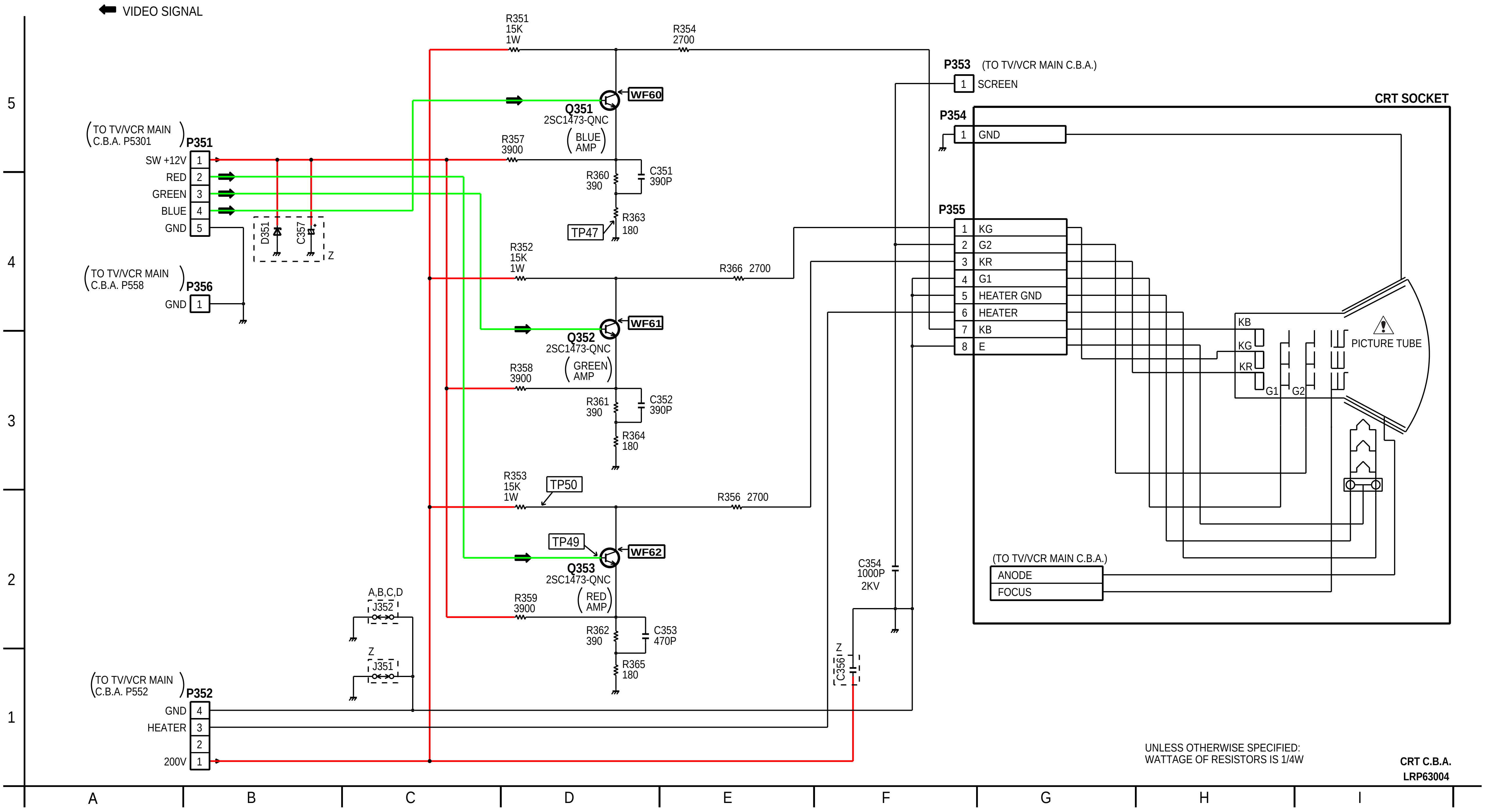
HEAD AMP C.B.A.
VJBS5021

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I
Not Used	Z



NOTE:
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IMPORTANT SAFETY NOTICE:
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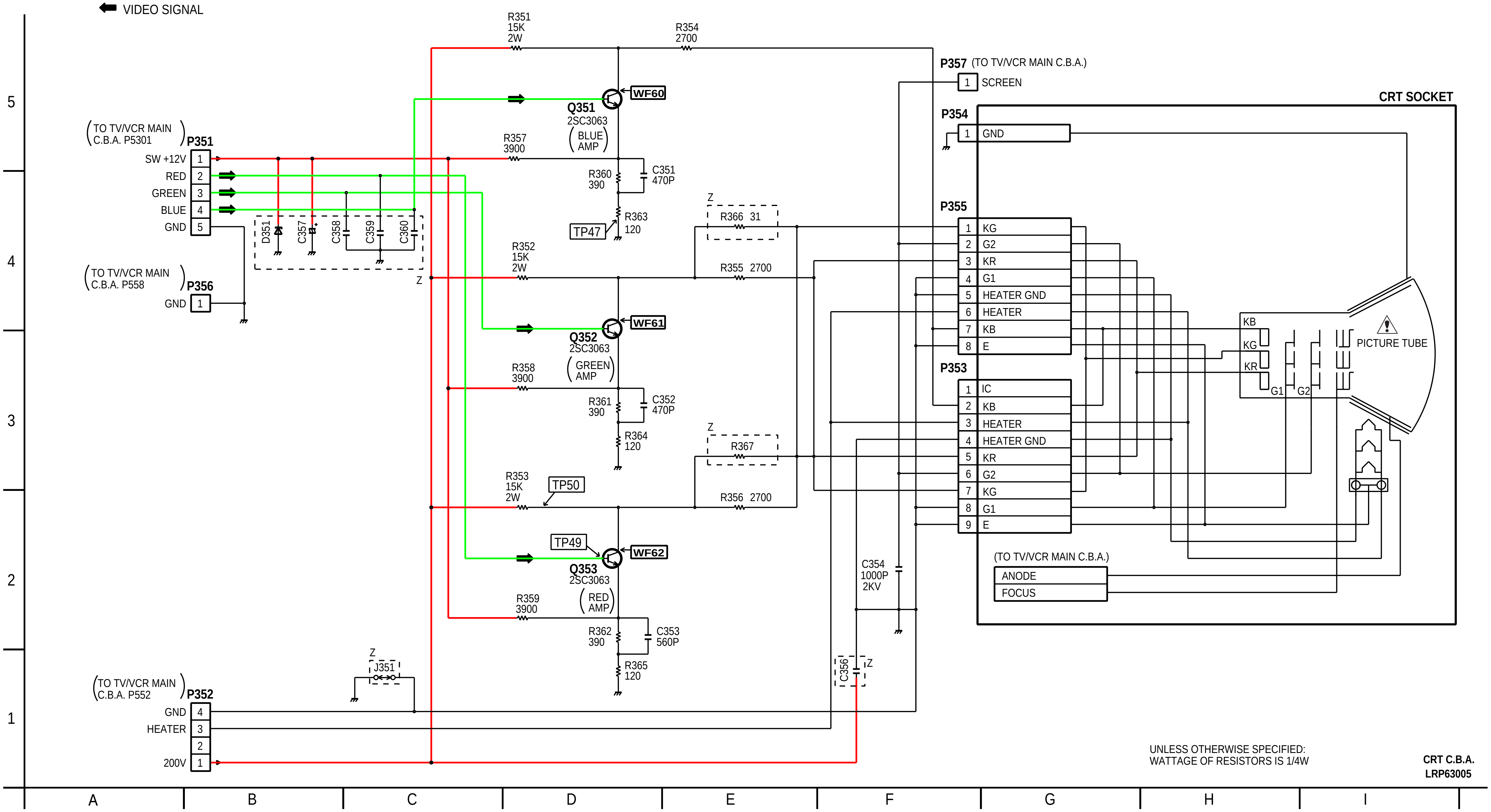
COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I
Not Used	Z



UNLESS OTHERWISE SPECIFIED:
WATTAGE OF RESISTORS IS 1/4W

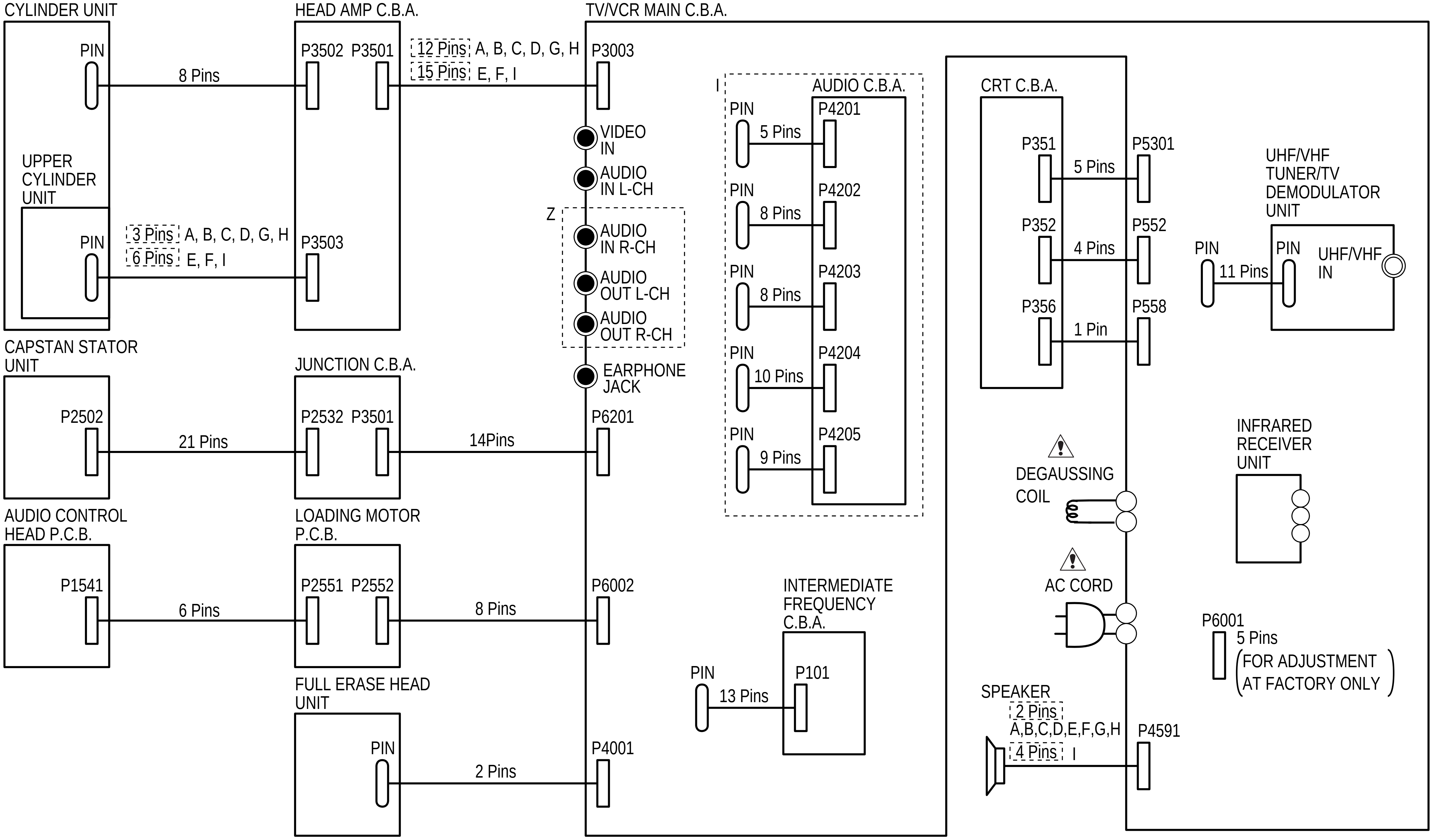
CRT C.B.A.
LRP63005

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I
Not Used	Z



1. **Important safety notice**
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components. Use only the specified parts.

2. Do not use the part number shown on this drawing for ordering.
The correct part number is shown in the parts list, and may be slightly different or amended since this drawing was prepared.

3. Use only original replacement parts:
   To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Parts different in shape or size may be used.
   However, only interchangeable parts will be supplied as service replacement parts.

5. Test point information
   ⦶ :Test point with a jumper wire across a hole in P.C.B.
   ▭→ :Test point with a component lead on the foil side.
   ▨ :Test point with no test pin.
   ● :Test point with a test pin.

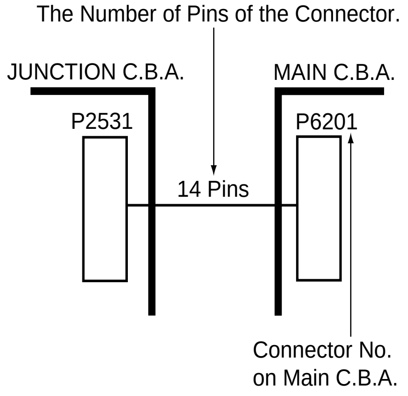
Schematic Diagram Notes

1. Indication for Zener Voltage of Zener Diodes
   The Zener Voltage of Zener Diodes are indicated as such on Schematic Diagrams.

   Example:
   (6.2V)......Zener Voltage

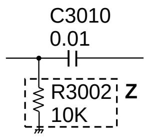
2. How to identify Connectors
   Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to, in other words, its counter part.
   Use the interconnection schematic diagram to find the connection between associated connectors.

   Example:
   The connections between C.B.A.s are shown below.



3. Parts enclosed in dashed lines marked "Z" are not used in any models included in this service manual.

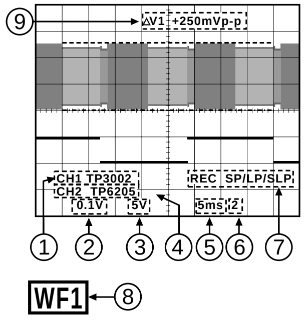
   Example:



4. The part number shown on this drawing is only main part number,
   except for safety parts. Be sure to make your orders of replacement parts according to the parts list.

Signal Waveform Note

How to read Signal Waveform



① Connecting Point
② Volts/Div
③ Volts/Div
④ Connecting Point
⑤ Time/Div
⑥ Trigger Channel of the scope (1:CH1,2:CH2)
⑦ Operation Mode of VCR
⑧ Waveform Point on Schematic
⑨ ΔV1:Peak to Peak

Voltage Chart Note

Voltage Measurement
a. Color bar signal in SP mode.
b. ---:Unmeasurable or not necessary to measure.

Circuit Board Layout Note

Circuit Board Layout shows components installed for various models.
For proper parts content for the model you are servicing,
please refer to the schematic diagram and parts list.

NOTE:
Circuit Board Layout includes components which are not used.

Comparison chart of models & marks

COMPARISON CHART
OF MODELS & MARKS

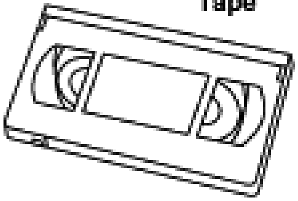
MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I
Not Used	Z

Note : Refer to item 3 of Schematic Diagram Notes for mark "Z".

Service Manual

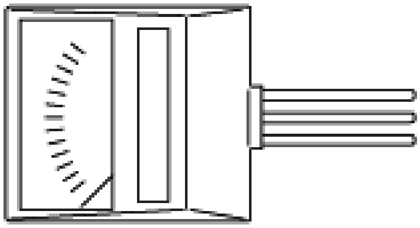
Service Position	Purpose
Service Position (1)	Mechanism check Mechanical adjustment Electrical adjustment
Service Position (2)	Main C.B.A. check

VFMS0003H6 **VHS Alignment Tape**

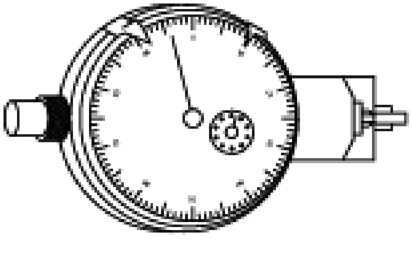


Video	Color Bar & Monoscope
Audio	6kHz(MONO)

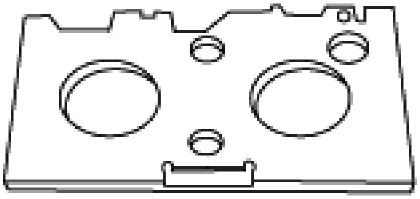
Back Tension Meter (Made in USA., Purchase Locally)



VFKS0009 **Reel Table Height Fixture**



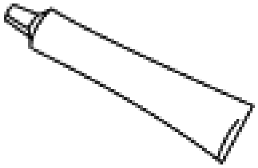
VFKS0010 **Post Adjustment Plate**



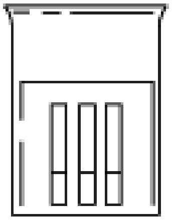
VFKS0081 **Grease**

VFK0329 **Post Adjustment Driver**

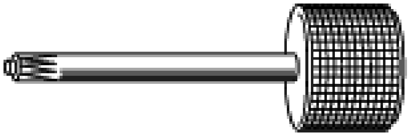
VFK1301 **Silicon Grease**



VFK27 **Head Cleaning Stick**

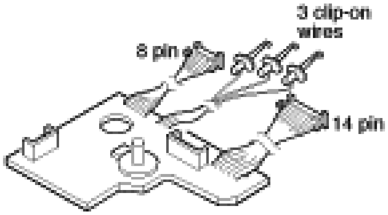


VFK0330 **H-Position Adjustment Driver**

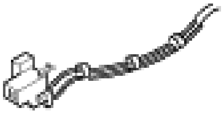


VUZS0002 **Extension Cable Kit**

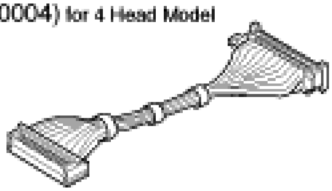
Mode Select SW. Ass'y (VUVS0001)



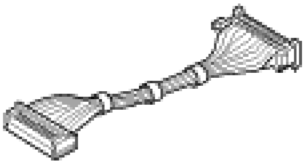
Extension Cable -1 (VUVS0002)



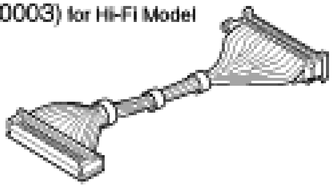
Extension Cable -2 (VUVS0004) for 4 Head Model



Extension Cable -2 (VUVS0005) for 2 Head Model



Extension Cable -2 (VUVS0003) for Hi-Fi Model



TSM10032-2 **Permalloy Magnetic Strip**

(Model: G, H, I)

SPECIFICATIONS

ITEM		SPECIFICATION	1	2	3	4	5
VCR	Video	Head: 2 rotary heads helical scanning system	o	o	-	o	-
		4 rotary heads helical scanning system	-	-	o	-	o
		Input Level: VIDEO IN Jack (Phono type) 1.0 Vp-p 75Ω unbalanced Signal-to-Noise Ratio: SP: more than 43 dB LP/SLP: more than 41 dB Horizontal Resolution: Color/Monochrome: more than 230 lines	o	o	o	o	o
	Audio	Head: Normal Mono: 1 stationary head	o	o	o	o	o
		Input Level: AUDIO IN Jack (Phono type) -10 dBv 50kΩ unbalanced	o	o	o	o	o
		Frequency Response: Normal Mono: SP: 100 Hz ~ 8 kHz LP: 100 Hz ~ 6 kHz SLP: 100 Hz ~ 5 kHz	o	o	o	o	o
		Signal-to-Noise Ratio: Normal Mono: SP: more than 42 dB LP/SLP: more than 40 dB	o	o	o	o	o
		Wow and Flutter: Normal Mono: SP Less than 0.2% WRMS LP: Less than 0.3% WRMS SLP: Less than 0.4% WRMS	o	o	o	o	o
	Tuner	Broadcast Channels: VHF 2 ~ 13, UHF 14 ~ 69 CABLE Channels: Midband A through I (14 ~ 22) Superband J through W (23 ~ 36) Hyperband AA ~ EEE (37 ~ 64) Lowband A-5 ~ A-1 (95 ~ 99) Special CABLE channel 5A (01) Ultraband 65 ~ 94, 100 ~ 125	o	o	o	o	o
VCR	Tape Speed	SP: 1-5/16 i.p.s (33.35 mm/sec), LP: 21/32 i.p.s (16.67 mm/sec), SLP: 7/16 i.p.s (11.12 mm/sec) Record/Playback Time: 8 Hrs with 160 min. type tape used in SLP mode FF/REW Time: Less than 3 min. (120 min. type tape)	o	o	o	o	o
	Tape Format	Tape width 1/2" (12.7 mm) high density tape	o	o	o	o	o
FM Radio	Band Range	87.5 ~ 108.1 MHz	o	-	o	o	o
DISPLAY	Picture Tube	13 inch measured diagonal 90° deflection Picture Tube	o	o	o	-	-
		20 inch measured diagonal 90° deflection Picture Tube	-	-	-	o	o
GENERAL	Power Source	120V AC ± 10%, 60 Hz ± 0.5%	o	o	o	o	o
	Power Consumption	Approx. 69 watts (Power On), Approx. 4.5 watts (Power Off)	o	o	o	-	-
		Approx. 110 watts (Power On), Approx. 4.5 watts (Power Off)	-	-	-	o	o
	Television System	EIA Standard (525 lines, 60 fields) NTSC Color Signal	o	o	o	o	o
	Operating Condition	41°F(5°C) ~ 104°F(40°C) (Temperature) 10% ~ 75% (Humidity)	o	o	o	o	o
	Dimension	15-3/16"(386 mm)(W) X 15-3/16"(385 mm)(H) X 14-3/4"(374 mm)(D)	o	o	o	-	-
		20-5/16"(515 mm)(W) X 19-7/8"(505 mm)(H) X 18-11/16"(474 mm)(D)	-	-	-	o	o
	Weight	26.4 lbs. (12 kg)	o	o	o	-	-
		50.7 lbs. (23 kg)	-	-	-	o	o

1. PV-M1349/ PV-M1359W
2. VV-1309/ VV-1319W
3. PV-M1369/ PV-M1379W
4. PV-M2059/ PV-M2069W
5. PV-M2079

Weight and dimensions shown are approximate.
Designs and specifications are subject to change without notice.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

TV/VCR MAIN CIRCUIT

MODE / PIN NO.	REC	PLAY
IC451		
1	10.4	10.4
2	3.8	3.8
3	5.1	5.1
4	0	0
5	0	0
6	0	0
7	5.1	5.1
8	24.5	24.5
9	1.9	1.9
10	1.3	1.3
11	0	0
12	11.8	11.8
13	24.9	24.9
IC801		
1	1.6	1.6
2	0	0
3	165.2	165.2
4	17.1	17.1
5	0	0
IC802		
1	13.9	13.9
2	12.9	12.9
3	4.2	4.2
4	17.1	17.1
IC803		
1	0	0
2	125.9	125.9
3	1.2	1.2
4	7.5	7.5
IC804		
1	16.8	16.8
2	0	0
3	12.0	12.0
IC3001		
1	5.1	5.1
2	3.4	3.4
3	2.1	2.1
4	5.1	5.1
5	4.3	4.3
6	---	---
7	5.2	5.2
8	5.2	5.2
9	2.2	2.2
10	2.8	2.8
11	0.8	0.8
12	2.8	2.8
13	0.4	0.4
14	0.5	0.5
15	0	0.9
16	3.1	3.8
17	2.4	1.8
18	3.1	5.7
19	2.6	2.6

MODE / PIN NO.	REC	PLAY
20	3.1	4.0
21	5.1	5.1
22	0	2.0
23	2.6	2.4
24	2.6	2.4
25	2.0	2.0
26	2.6	2.5
27	2.0	2.0
28	0	0
29	1.9	1.8
30	1.9	1.6
31	2.0	1.2
32	2.4	2.4
33	2.7	2.7
34	3.0	2.8
35	2.6	2.6
36	2.5	2.5
37	0	1.5
38	4.4	2.3
39	0	1.5
40	3.8	2.4
41	0	0
42	0	0
43	3.4	3.3
44	2.6	2.6
45	2.6	2.6
46	2.6	2.6
47	5.1	5.1
48	1.3	1.3
49	2.7	2.7
50	3.8	3.1
51	5.1	5.1
52	2.5	2.5
53	2.5	2.5
54	4.1	0.1
55	0	0
56	0.1	4.4
57	0	2.6
58	2.6	2.6
59	2.6	2.6
60	2.6	2.6
61	2.6	2.6
62	0	0
63	0	0
64	1.6	1.8
65	2.6	2.6
66	0	2.6
67	2.6	0
68	5.2	0
69	2.6	2.6
70	0.3	0
71	2.6	2.6
72	2.6	0
73	2.6	2.6

MODE / PIN NO.	REC	PLAY
74	0	0
75	0	0
76	3.3	0
77	0	0
78	2.1	0
79	3.0	0
80	0	2.0
81	---	---
82	---	---
83	2.6	0
84	2.5	0
IC3201		
1	3.4	3.4
2	-2.5	-2.5
3	0	0
4	2.5	2.5
5	2.5	2.5
6	-2.7	-2.7
7	2.1	2.1
8	3.0	3.0
IC3301		
1	0	0
2	0	2.7
3	2.2	2.3
4	0	0
5	2.1	2.3
6	2.3	2.3
7	0	5.2
8	0	0
9	5.2	5.2
10	0	0
11	0	0
12	0	0
13	5.2	5.2
14	0	3.1
15	0	2.9
16	0	0
17	5.0	5.0
18	4.4	4.4
19	0	0
20	0	0
21	0	4.2
22	0	4.3
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
32	0	0
33	0	0

MODE / PIN NO.	REC	PLAY
34	0	0
35	0	0
36	0	0
37	5.2	0
38	2.3	0
39	0	0
40	5.2	0
41	0.4	0
42	0	0
43	4.9	4.9
44	0	3.6
45	0	0
46	0	0
47	0	0
48	0	0
IC4501		
1	11.4	11.4
2	4.7	4.7
3	---	---
4	2.7	2.7
5	6.0	6.0
6	6.2	6.2
7	0	0
8	6.3	6.3
9	16.6	16.6
IC4511		
1	11.4	11.4
2	4.7	4.7
3	---	---
4	2.7	2.7
5	6.0	6.0
6	6.2	6.2
7	0	0
8	6.3	6.3
9	16.6	16.6
IC5301		
1	2.7	2.7
2	2.5	2.5
3	3.4	3.4
4	3.1	3.1
5	2.1	2.1
6	2.1	2.1
7	6.2	6.2
8	0	0
9	0	0
10	3.8	3.8
11	4.9	4.9
12	2.8	2.8
13	4.2	4.2
14	6.4	6.4
15	4.3	4.3
16	0.6	0.6
17	0	0
18	0.6	0.6

MODE / PIN NO.	REC	PLAY
19	2.2	2.2
20	0	0
21	3.7	3.7
22	3.7	3.7
23	3.7	3.7
24	6.0	6.0
25	2.7	2.7
26	9.2	9.2
27	0	0
28	0	0
29	0	0
30	5.8	5.8
31	3.3	3.3
32	3.7	3.7
33	6.3	6.3
34	0	8.3
35	0	4.9
36	4.3	4.3
37	9.7	9.7
38	0	0
39	2.3	2.3
40	2.1	2.1
41	2.0	2.0
42	0	0
43	4.9	4.9
44	4.9	4.9
45	0.4	0.4
46	2.5	2.5
47	5.1	5.1
48	2.7	2.7
IC6001		
1	0	0
2	0	0
3	0	0
4	0	2.6
5	2.4	2.4
6	0	0
7	0	0
8	0	0
9	2.5	2.5
10	0	2.4
11	0	5.1
12	0	4.0
13	0.1	5.3
14	5.2	0
15	0	0
16	---	---
17	0	0
18	---	---
19	---	---
20	5.2	0
21	0	0
22	---	---
23	2.6	2.6

MODE / PIN NO.	REC	PLAY
24	2.6	2.6
25	4.5	4.5
26	5.2	5.2
27	5.1	5.1
28	5.1	5.1
29	2.6	2.6
30	5.2	5.2
31	0	0
32	5.2	5.2
33	5.3	5.3
34	5.2	5.3
35	0	0
36	0	0
37	0	0
38	5.2	5.3
39	0	0
40	0	0
41	5.2	5.2
42	0	0
43	5.2	5.2
44	---	---
45	4.5	4.5
46	0.3	0.3
47	5.1	5.1
48	5.2	5.2
49	0.1	0
50	5.2	0
51	1.3	1.3
52	5.2	5.2
53	0	0
54	0	0
55	0	0
56	0	0
57	0.4	0.4
58	5.3	5.3
59	5.2	5.2
60	5.3	5.3
61	5.2	5.3
62	0	0
63	5.1	0
64	5.0	0
65	5.2	5.3
66	0	0
67	0	0
68	5.2	5.3
69	5.2	5.3
70	5.2	5.3
71	0	0
72	2.6	2.6
73	5.3	5.3
74	5.3	5.3
75	5.3	5.3
76	5.3	5.3
77	0	0

MODE / PIN NO.	REC	PLAY
78	5.1	5.2
79	5.2	5.2
80	5.2	5.2
81	3.8	3.0
82	0	0
83	0	0
84	0	2.1
85	3.0	2.6
86	2.1	2.6
87	2.6	2.6
88	2.6	2.6
89	2.6	2.6
90	2.6	2.6
91	0	0
92	5.2	5.2
93	2.6	2.6
94	2.6	2.6
95	2.6	2.6
96	0	0
97	1.2	1.2
98	1.3	1.3
99	5.2	5.2
100	2.1	2.1
IC6002		
1	1.3	1.3
2	0	0
3	1.3	1.3
4	---	---
IC6003		
1	0	0
2	1.3	1.3
3	0	0
4	---	---
IC6004		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.9	4.9
6	5.0	5.0
7	0	0
8	5.1	5.1
Q431		
E	2.5	2.5
C	0	0
B	1.9	1.9
Q501		
E	0	0
C	62.0	62.0
B	0.4	0.4
Q506		
E	2.6	2.6
C	0	0

MODE / PIN NO.	REC	PLAY
B	2.6	2.6
Q507		
E	0	0
C	2.6	2.6
B	0	0
Q551		
E	1.7	1.7
C	10.5	10.5
B	2.1	2.1
Q571		
E	1.7	1.7
C	10.5	10.5
B	2.1	2.1
Q581		
E	115.2	115.2
C	0	0
B	114.8	114.8
Q801		
E	0	0
C	0.2	0.2
B	0.8	0.8
Q802		
E	1.0	1.0
C	148.3	148.3
B	-1.9	-1.9
Q807		
E	-1.5	-1.5
C	-1.3	-1.3
B	-0.6	-0.6
Q810		
E	7.7	7.7
C	12.9	12.9
B	7.7	7.7
Q812		
E	0	0
C	0.2	0.2
B	0.8	0.8
Q813		
E	13.4	13.4
C	16.9	16.9
B	14.0	14.0
Q815		
E	0	0
C	14.0	14.0
B	0.7	0.7
Q817		
E	-0.6	-0.6
C	4.2	4.2
B	0	0
Q819		
E	5.3	5.3
C	5.2	5.2
B	4.7	4.7
Q820		

MODE / PIN NO.	REC	PLAY
E	4.6	4.6
C	0	0
B	4.2	4.2
Q821		
E	0	0
C	0	0
B	0.7	0.7
Q822		
E	0	0
C	0.7	0.7
B	0	0
Q3001		
E	1.6	1.6
C	0	0
B	1.0	1.0
Q3002		
E	1.6	1.6
C	0	0
B	1.0	1.0
Q3302		
E	0	0
C	0.3	0.3
B	4.9	4.9
Q3310		
E	0	0
C	4.2	4.2
B	0	0
Q3311		
E	1.7	1.7
C	0	0
B	1.0	1.0
Q3314		
E1	1.5	1.5
C1	5.1	5.1
B1	2.1	2.1
E2	1.5	1.5
C2	1.7	1.7
B2	1.9	1.9
Q3315		
E	1.7	1.7
C	5.0	5.0
B	5.1	5.1
Q4001		
E	5.1	5.1
C	-18.2	5.1
B	5.1	4.4
Q4002		
E	-21.0	0
C	0	0
B	-14.1	0
Q4003		
E	-20.1	0
C	0	0
B	-14.0	0.8

MODE / PIN NO.	REC	PLAY
Q4031		
E	0	0
C	5.2	5.2
B	5.9	5.9
Q4101		
E	0	0
C	11.3	0.5
B	0.2	0.5
Q4154		
E	0	0
C	2.4	2.4
B	0	0
Q4171		
E	0	0
C	0	0
B	0.2	0.2
Q5301		
E	2.7	2.7
C	9.2	9.2
B	3.4	3.4
Q5302		
E	6.3	6.3
C	9.2	9.2
B	6.9	6.9
Q5303		
E	0	0
C	0.1	0.1
B	0.7	0.7
Q5601		
E	4.6	4.6
C	9.2	9.2
B	4.0	4.0
Q5901		
E	9.2	9.2
C	11.9	11.9
B	9.8	9.8
Q6002		
E	12.1	12.1
C	12.1	0.5
B	11.2	12.1
Q6003		
E	1.1	0.4
C	11.2	12.1
B	5.0	0
Q6004		
E	5.3	5.3
C	5.1	5.1
B	4.0	4.0
Q6005		
E	0	0
C	0	0
B	0.8	0.8
Q6006		
E	5.1	5.1

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MODE / PIN NO.	REC	PLAY
C	5.1	5.1
B	0	0
Q6007		
E	0	0
C	5.1	5.1
B	0	0
Q6009		
E	0	0
C	5.1	5.1
B	---	---
Q6010		
E	0	0
C	5.1	5.1
B	---	---
Q7001		
E	1.8	1.8
C	9.5	9.5
B	0	0
TP501	114.9	114.9
TP502	0	0
TP551	-20.0	-20.0
TP552	-20.9	-20.9
TP556	208.1	208.1
TP558	27.7	27.7
TP559	18.0	18.0
TP801	77.8	77.8
TP802	77.9	77.9
TP803	2.6	2.6
TP804	0	0
TP805	0.2	0.2
TP806	77.9	77.9
TP807	77.8	77.8
TP808	5.3	5.3
TP809	5.2	5.2
TP810	0.2	0.2
TP1201	12.0	12.0
TP1203	115.2	115.2
TP1204	16.9	16.9
TP1206	-16.5	-16.5
TP1207	41.3	41.3
TP1208	0	0
TP1209	7.3	7.3
TP1054	5.2	5.3
TP3001	2.8	2.8
TP3002	2.7	2.3
TP3003	2.7	2.7
TP3004	4.3	4.3
TP3005	2.6	2.6
TP3006	2.5	2.5
TP3007	2.1	2.1
TP3008	3.4	3.4
TP3009	0	0
TP3010	5.1	5.1

MODE / PIN NO.	REC	PLAY
TP3011	4.3	4.3
TP3012	2.9	3.4
TP3301	3.2	3.2
TP3302	3.0	0
TP4001	0	0
TP4002	0	0
TP4003	0	0
TP4004	0	0
TP4101	0	0
TP4102	0	0
TP4501	0	0
TP4502	18.0	18.0
TP4503	7.6	7.6
TP4504	1.3	1.3
TP4591	7.6	7.6
TP4592	1.3	1.3
TP5301	0	0
TP5302	0	0
TP5303	2.7	2.7
TP5304	11.9	11.9
TP5305	2.7	2.7
TP5306	0	0
TP5307	---	---
TP5308	5.2	5.2
TP5309	3.4	2.3
TP5310	7.8	7.8
TP5311	5.1	5.1
TP5401	3.8	3.8
TP5402	1.9	1.9
TP5501	0.6	0.6
TP5502	0.6	0.6
TP5503	0	0
TP5504	0	0
TP5505	0	0
TP5506	5.7	5.7
TP6001	---	---
TP6002	---	---
TP6003	3.4	3.0
TP6004	5.1	5.1
TP6005	5.1	5.1
TP6007	0	0
TP6008	0	0
TP6009	5.2	5.2
TP6013	2.5	2.5
TP6014	0	0
TP6201	2.6	2.6
TP6202	2.2	2.2
TP6203	2.6	2.6
TP6204	1.2	1.2
TP6205	2.6	2.6
TP6206	3.0	0
TP6207	2.6	2.6
TP6208	2.5	2.5
TP6209	2.4	2.4

MODE / PIN NO.	REC	PLAY
TP6210	0	2.1
TP6211	2.5	2.5
TP7001	4.3	4.3

AUDIO CIRCUIT (I)

MODE / PIN NO.	REC	PLAY
IC9001		
1	4.6	4.6
2	3.8	3.8
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	1.3	1.3
10	1.3	1.3
11	1.3	1.3
12	4.6	4.6
13	4.7	4.7
14	0	0
15	4.7	4.7
16	4.7	4.7
17	4.7	4.7
18	4.6	4.6
19	0	0
20	4.7	4.7
21	4.6	4.6
22	4.6	4.6
23	1.8	1.8
24	4.6	4.6
25	1.8	1.8
26	4.6	4.6
27	4.6	4.6
28	4.5	4.5
29	0	0
30	9.2	9.2
31	4.7	4.7
32	1.3	1.3
33	4.7	4.7
34	4.6	4.6
35	3.5	3.5
36	0	0
37	4.7	4.7
38	4.6	4.6
39	4.6	4.6
40	4.6	4.6
41	4.7	4.7
42	0	0
43	0	0
44	5.1	5.1
45	5.2	5.2
46	5.2	5.2
47	0	0
48	3.0	3.0
IC9201		
1	3.1	3.1
2	3.7	3.7
3	5.1	5.1
4	4.2	4.2

MODE / PIN NO.	REC	PLAY
5	0	0
6	5.1	5.1
7	4.5	4.5
8	2.8	2.8
9	2.8	2.8
IC9301		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	-5.7	-5.7
8	0	0
9	4.3	4.3
10	0	0
11	4.3	4.3
12	0	0
13	0.2	0.2
14	0.2	0.2
15	---	---
16	5.1	5.1
IC9302		
1	0	0
2	0	0
3	0	0
4	-5.7	-5.7
5	0	0
6	0	0
7	0	0
8	5.1	5.1
Q9001		
E	0	0
C	0	0
B	3.8	3.8
Q9002		
E	4.1	4.1
C	9.2	9.2
B	4.7	4.7
Q9003		
E	4.1	4.1
C	9.2	9.2
B	4.7	4.7
TP9001	4.7	4.7
TP9002	4.7	4.7
TP9003	0	0
TP9004	4.6	4.6
TP9201	5.2	5.2

HEAD AMP CIRCUIT (A,B,C,D,G,H)

MODE / PIN NO.	REC	PLAY
IC2601		
1	13.0	13.0
2	13.0	13.0
3	13.5	13.5
4	1.2	1.2
5	5.1	5.1
6	0.9	0.9
7	1.0	1.0
8	0.7	0.7
9	2.6	2.6
10	1.5	1.5
11	0	0
12	3.9	3.9
13	3.9	3.9
14	3.9	3.9
15	0.1	0.1
16	13.2	13.2
IC3501		
1	2.6	2.6
2	0	4.2
3	0.3	1.4
4	0	0.7
5	0	0
6	0	0.7
7	0.2	1.4
8	0	0
9	0	0
10	0.2	0.2
11	0	0
12	0	0
13	---	---
14	0.2	0.2
15	---	---
16	6.3	0
17	6.3	0
18	6.3	0
19	---	---
20	---	---
21	---	---
22	0	0
23	0	0
24	0	0
25	11.9	0.5
26	0	0
27	0	0
28	0	0
29	0	0
30	2.7	2.3
31	5.1	0.1
32	0	0
33	0	0
34	0	0
35	12.0	12.0
36	0.1	5.0
TP3501	0	0

HEAD AMP CIRCUIT (E,F,I)

MODE / PIN NO.	REC	PLAY
IC2601		
1	13.0	13.0
2	13.0	13.0
3	13.5	13.5
4	1.2	1.2
5	5.1	5.1
6	0.9	0.9
7	1.0	1.0
8	0.7	0.7
9	2.6	2.6
10	1.5	1.5
11	0	0
12	3.9	3.9
13	3.9	3.9
14	3.9	3.9
15	0.1	0.1
16	13.2	13.2
IC3501		
1	2.6	2.6
2	0	4.2
3	0.3	1.4
4	0	0.7
5	0	0
6	0	0.7
7	0.2	1.4
8	0	0
9	0	0
10	0.2	2.2
11	0	0
12	0	0
13	0	0
14	0.2	2.2
15	---	---
16	6.3	0
17	6.3	0
18	6.3	0
19	---	---
20	---	---
21	---	---
22	---	---
23	---	---
24	---	---
25	11.9	0.5
26	5.0	5.0
27	0	0
28	0	0
29	0	0
30	2.7	2.3
31	5.1	0.1
32	0.1	0.1
33	0	0
34	0.1	0.7
35	12.0	12.0
36	0.1	5.0
TP3501	0	0

CAPSTAN STATOR CIRCUIT

MODE / PIN NO.	REC	PLAY
IC2501		
1	13.0	13.0
2	13.0	13.0
3	13.5	13.5
4	1.2	1.2
5	1.2	1.2
6	1.2	1.2
7	0.1	2.7
8	0	0
9	2.6	2.6
10	1.5	1.5
11	2.6	2.6
12	0.5	0.5
13	3.9	3.9
14	3.9	3.9
15	0	0
16	0	0
17	---	---
18	13.5	13.5
19	2.8	2.8
20	0	0.7
21	2.8	2.8
22	0	0.7
23	0.2	1.4
24	0	0
25	0	0
26	13.5	13.5
27	---	---
28	5.1	5.1

CRT CIRCUIT (A,B,C,D,E,F)

MODE / PIN NO.	REC	PLAY
Q351		
E	3.6	3.6
C	117.5	117.5
B	4.0	4.0
Q352		
E	3.5	3.5
C	120.0	120.0
B	3.9	3.9
Q353		
E	3.7	3.7
C	119.0	119.0
B	3.9	3.9
TP47	0	0
TP49	3.9	3.9
TP50	119.0	119.0

CRT CIRCUIT (G,H,I)

MODE / PIN NO.	REC	PLAY
Q351		
E	3.7	3.7
C	137.0	137.0
B	4.0	4.0
Q352		
E	3.5	3.5
C	143.0	143.0
B	3.8	3.8
Q353		
E	3.7	3.7
C	138.5	138.5
B	4.0	4.0
TP47	0	0
TP49	4.0	4.0
TP50	139.0	139.0

COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

SYSTEM CONTROL/SERVO

MODE / PIN NO.	STOP	FF	REW
IC2501			
1	13.0	13.0	13.0
2	13.0	13.0	13.0
3	13.5	13.5	13.5
4	1.2	1.2	1.2
5	1.2	1.2	1.2
6	1.2	1.2	1.2
7	0.1	0.1	0.1
8	0	0	0
9	2.6	2.6	2.6
10	1.5	1.5	1.5
11	2.6	2.6	2.6
12	0.5	0.5	0.5
13	3.9	3.9	3.9
14	3.9	3.9	3.9
15	0	0	0
16	0	0	0
17	---	---	---
18	13.5	13.5	13.5
19	2.8	2.8	2.8
20	0	0	0
21	2.8	2.8	2.8
22	0	0	0
23	0.2	0.2	0.2
24	1.8	0	0
25	1.8	0	0
26	13.5	13.5	13.5
27	---	---	---
28	5.1	5.1	5.1
IC2601			
1	13.0	13.0	13.0
2	13.0	13.0	13.0
3	13.5	13.5	13.5
4	1.2	1.2	1.2
5	5.1	5.1	5.1
6	0.9	0.9	0.9
7	1.0	1.0	1.0
8	0.7	0.7	0.7
9	2.6	2.6	2.6
10	1.5	1.5	1.5
11	0	0	0
12	3.9	3.9	3.9
13	3.9	3.9	3.9
14	3.9	3.9	3.9
15	0.1	0.1	0.1
16	13.2	13.2	13.2
IC6001			
1	0	0	0
2	0	0	0
3	0	0	0
4	2.6	2.4	2.4
5	2.6	2.4	2.4
6	0	0	0
7	0	0	0

MODE / PIN NO.	STOP	FF	REW
8	5.0	0	0
9	4.1	2.5	2.5
10	2.6	2.3	2.4
11	5.0	5.1	2.4
12	4.0	3.9	4.1
13	5.2	5.2	5.2
14	5.2	5.2	5.2
15	0	0	0
16	5.1	5.2	0
17	0	0	0
18	---	---	---
19	---	---	---
20	5.2	5.2	5.2
21	0	0	0
22	0	0	0
23	5.2	2.6	2.6
24	5.2	2.6	2.6
25	4.8	4.5	4.5
26	5.2	5.2	5.2
27	0	5.1	5.1
28	5.1	5.1	5.1
29	5.2	2.6	2.6
30	5.2	5.2	5.2
31	0	0	0
32	-0.5	5.2	5.2
33	5.3	5.3	5.3
34	5.2	5.2	5.2
35	0	0	0
36	0	0	0
37	0	0	0
38	0	5.3	5.3
39	5.2	5.2	5.2
40	0	0	0
41	5.2	5.2	5.2
42	0	0	0
43	5.2	5.2	5.2
44	0	0	0
45	4.9	4.4	4.4
46	0.2	5.2	0.1
47	5.6	5.1	5.1
48	5.2	5.2	5.2
49	0	0	0
50	5.2	0	5.2
51	1.3	2.6	2.6
52	5.2	5.2	5.2
53	2.6	0	5.2
54	0	0	0
55	0	0	0
56	0	0	0.1
57	0	0.4	0.4
58	0	5.3	5.3
59	5.2	5.2	5.2
60	0	5.3	5.3
61	5.2	5.2	5.2

MODE / PIN NO.	STOP	FF	REW
62	0	0	0
63	5.1	5.1	5.1
64	4.9	5.0	5.0
65	5.2	5.2	5.3
66	0	0	0
67	0	0	0
68	5.2	5.2	5.2
69	5.2	5.2	5.2
70	5.2	5.2	0
71	0	0	0
72	2.5	2.5	2.5
73	5.3	5.3	5.3
74	5.3	5.3	5.3
75	5.3	5.3	5.3
76	5.3	0	5.3
77	0	0	0
78	5.1	3.2	3.2
79	5.2	5.2	5.2
80	5.2	5.2	5.2
81	3.8	3.8	3.8
82	0	0	0
83	0	0	0
84	2.5	2.3	2.3
85	2.7	2.6	2.6
86	2.7	2.6	2.6
87	2.7	2.6	2.6
88	2.7	2.6	2.6
89	2.7	2.6	2.6
90	2.7	2.6	2.6
91	0	0	0
92	5.3	5.2	5.2
93	2.7	---	---
94	2.7	2.6	2.6
95	2.7	2.6	2.6
96	0	0	0
97	5.2	1.2	1.1
98	5.1	3.1	3.2
99	0.2	2.5	2.5
100	2.1	2.1	2.1
IC6002			
1	1.2	1.2	1.2
2	0	0	0
3	1.2	1.2	1.2
4	---	---	---
IC6003			
1	2.4	2.4	2.4
2	1.2	1.2	1.2
3	0	0	0
4	---	---	---
Q6002			
E	12.5	12.1	12.1
C	0.5	1.0	1.0
B	12.1	12.1	12.1

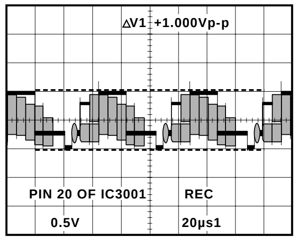
MODE / PIN NO.	STOP	FF	REW
Q6003			
E	0	0	0
C	12.1	12.1	12.1
B	0	0	0
Q6004			
E	5.3	5.3	5.3
C	0	0	0
B	5.1	5.1	5.1
Q6005			
E	5.1	5.1	5.1
C	5.1	5.1	5.1
B	4.4	4.4	4.4
Q6006			
E	0	0	0
C	0	0	0
B	0.8	0.8	0.8
Q6007			
E	0	0	0
C	5.2	5.2	5.2
B	0	0	0
Q6009			
E	0	0	0
C	5.1	5.1	5.1
B	---	---	---
Q6010			
E	0	0	0
C	5.1	5.1	5.1
B	---	---	---
TP6001	---	---	---
TP6002	---	---	---
TP6003	3.8	3.8	3.8
TP6004	5.1	5.1	5.1
TP6005	5.1	5.1	5.1
TP6007	0	0	0
TP6008	0	0	0
TP6009	5.2	5.2	5.2
TP6014	0	0	0
TP6201	2.6	2.2	2.2
TP6202	4.5	2.4	2.4
TP6203	2.5	2.5	2.5
TP6204	1.0	1.0	1.0
TP6205	2.6	2.6	2.6
TP6206	2.5	2.5	2.5
TP6207	2.5	2.5	2.5
TP6208	4.4	2.6	2.6
TP6209	4.9	0	0
TP6210	2.3	1.9	1.9
TP6211	2.5	2.5	2.5

⚠ WARNING

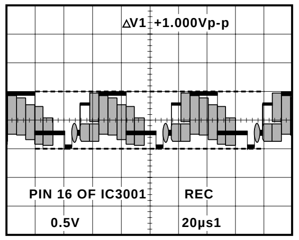
This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

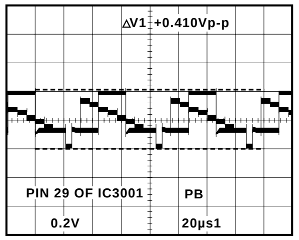
TV / VCR MAIN C.B.A.



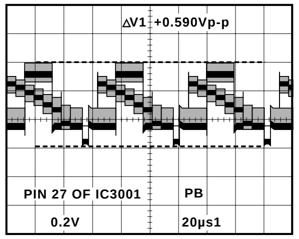
WF1



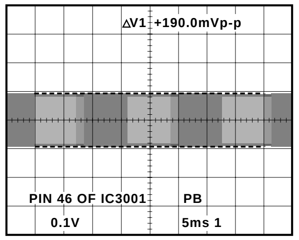
WF2



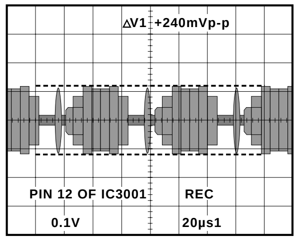
WF3



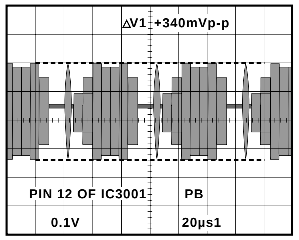
WF4



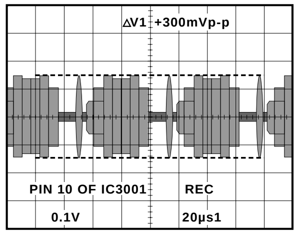
WF5



WF6



WF6



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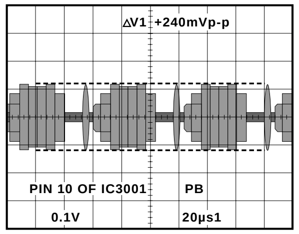
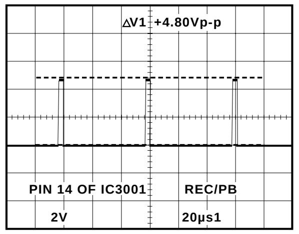
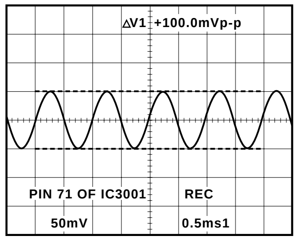


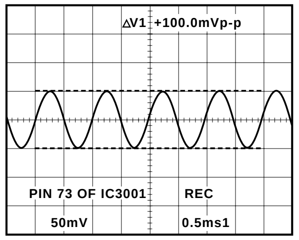
WF7



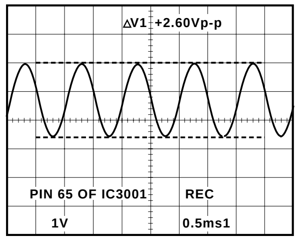
WF8



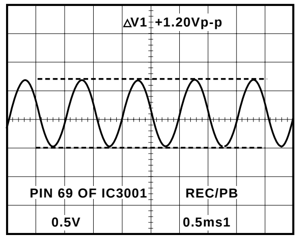
WF9



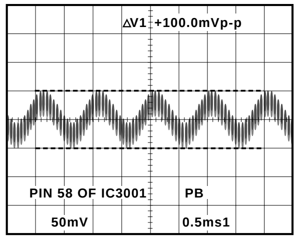
WF10



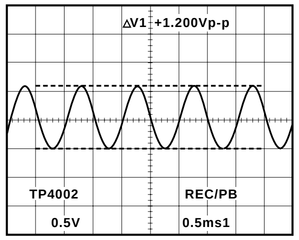
WF11



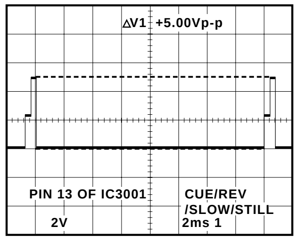
WF12



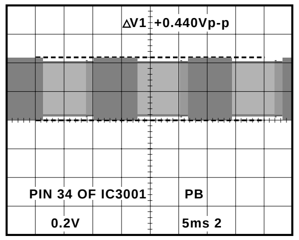
WF13



WF14



WF15



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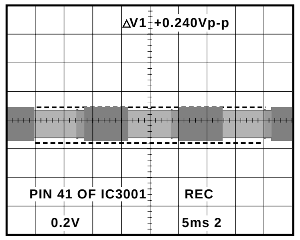

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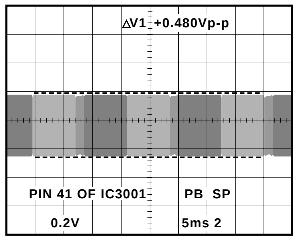
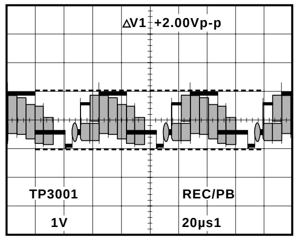
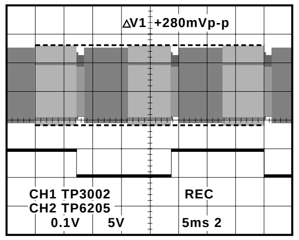


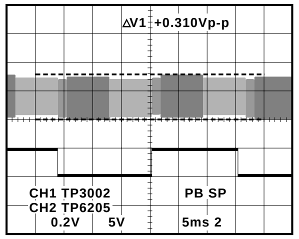
WF17



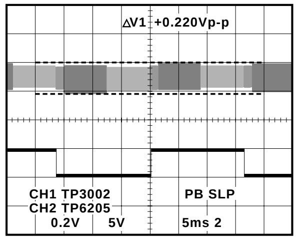
WF18



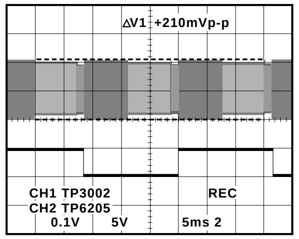
CH1 WF19
CH2 WF34
(A,B,C,D,G,H)



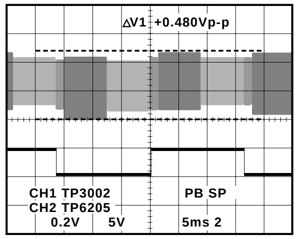
CH1 WF19
CH2 WF34
(A,B,C,D,G,H)



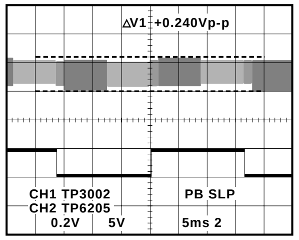
CH1 WF19
CH2 WF34
(A,B,C,D,G,H)



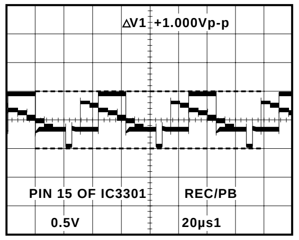
CH1 WF19
CH2 WF34
(E,F,I)



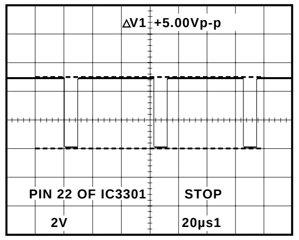
CH1 WF19
CH2 WF34
(E,F,I)



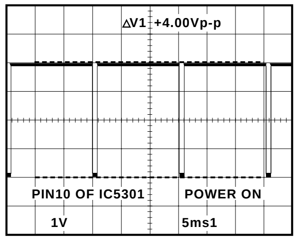
CH1 WF19
CH2 WF34
(E,F,I)



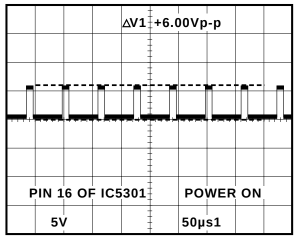
WF20



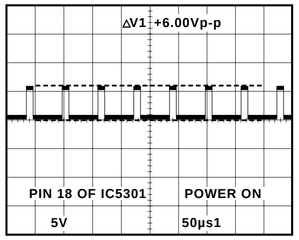
WF21
(BLUE BACK)



WF23



WF24

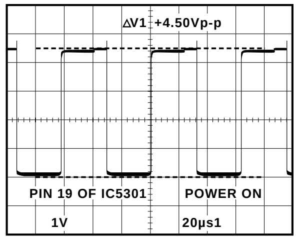


WF25

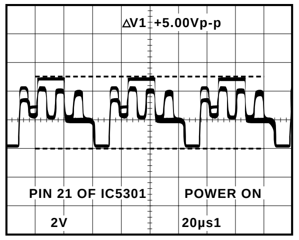
COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I

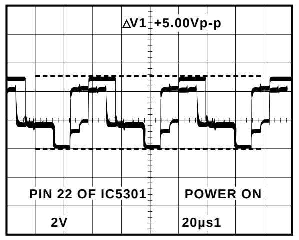
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.



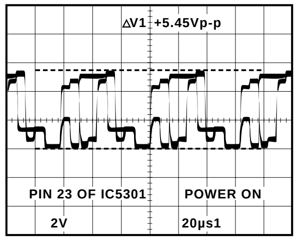
WF26



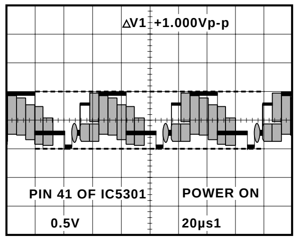
WF27



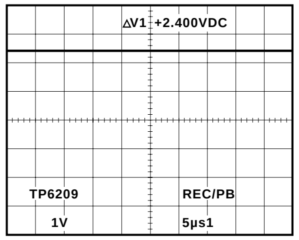
WF28



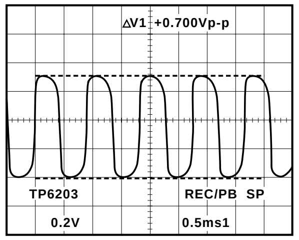
WF29



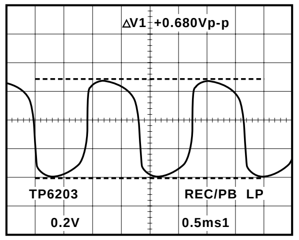
WF30



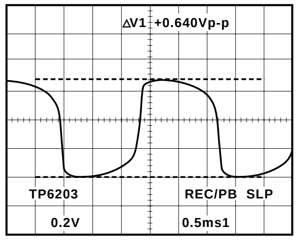
WF31



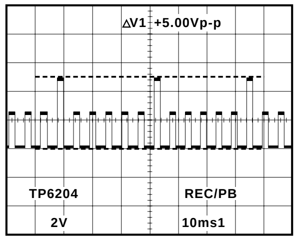
WF32



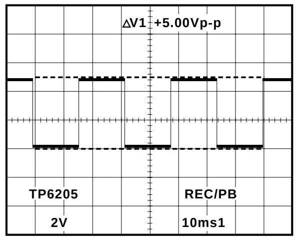
WF32



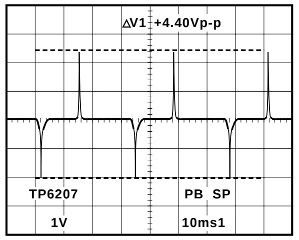
WF32



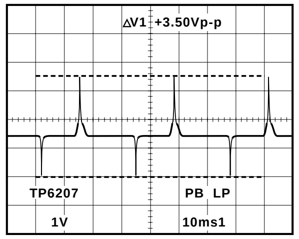
WF33



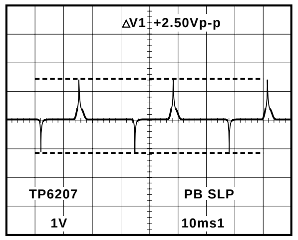
WF34



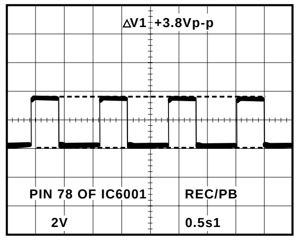
WF35



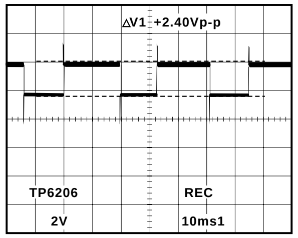
WF35



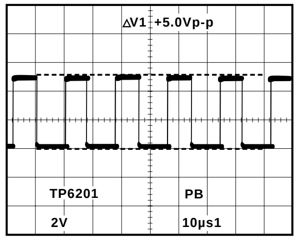
WF35



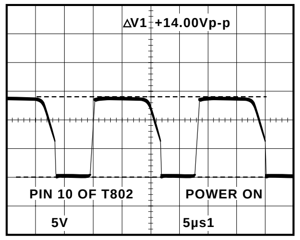
WF36



WF37



WF38



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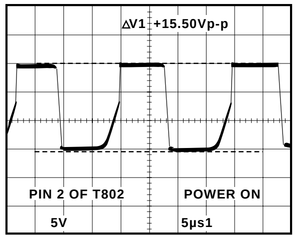

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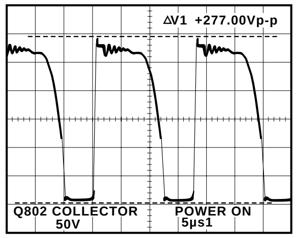
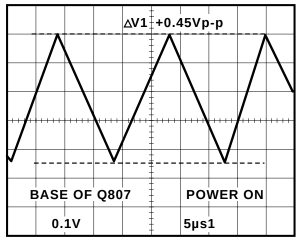
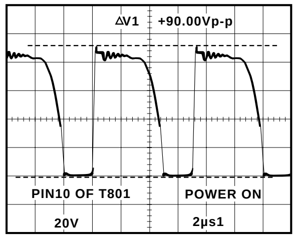


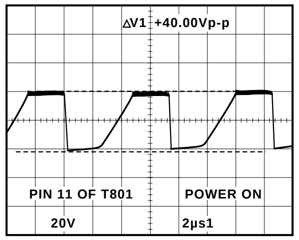
WF41



WF42



WF43



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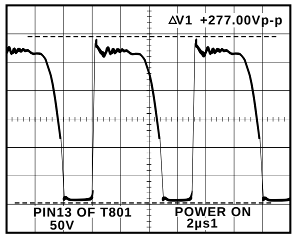
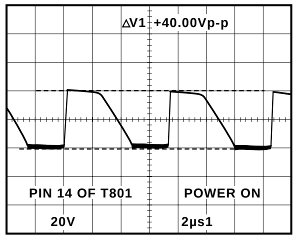
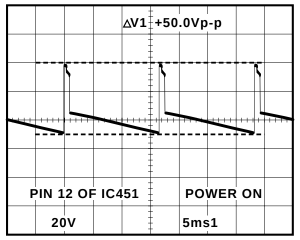


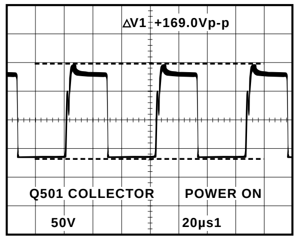
WF45



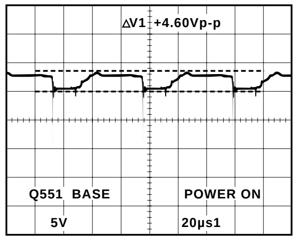
WF46



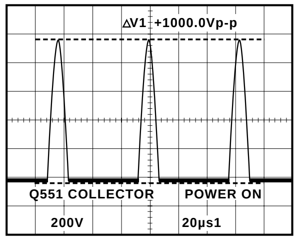
WF47



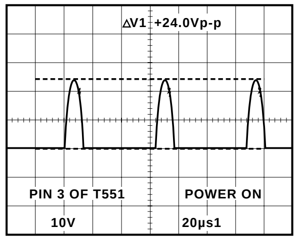
WF48



WF49

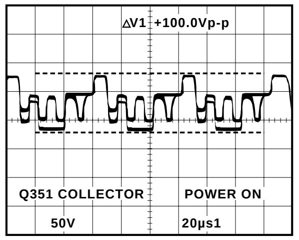


WF50

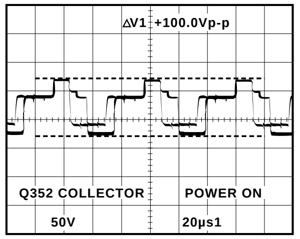


WF51

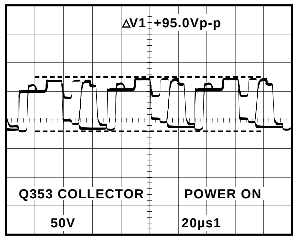
CRT C.B.A.
(A,B,C,D,E,F)



WF60



WF61



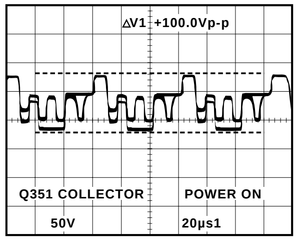
WF62

COMPARISON CHART OF MODELS & MARKS

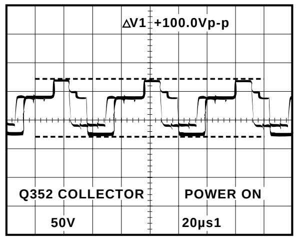
MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

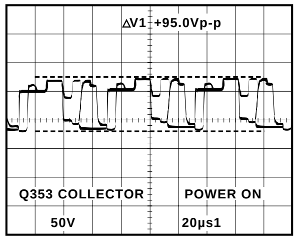
CRT C.B.A. (G,H,I)



WF60

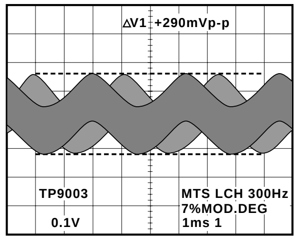


WF61

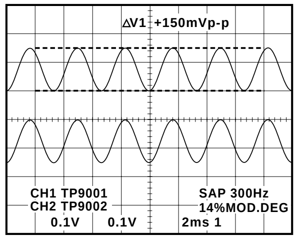


WF62

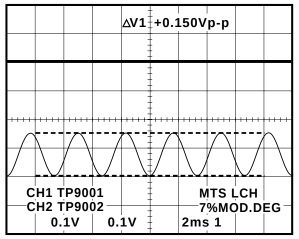
AUDIO C.B.A. (I)



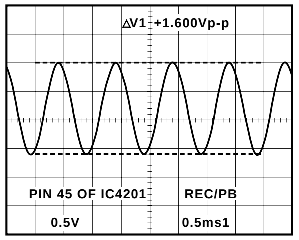
WF70



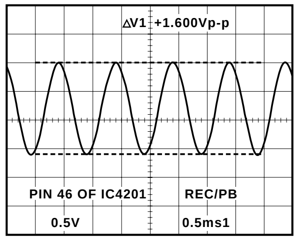
CH1 WF72
CH2 WF71



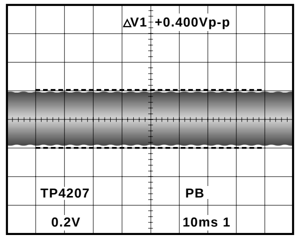
CH1 WF72
CH2 WF71



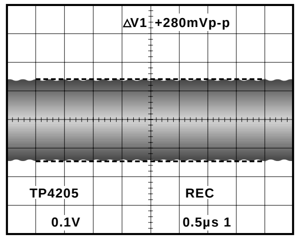
WF73



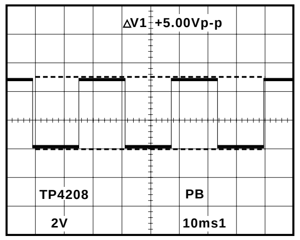
WF74



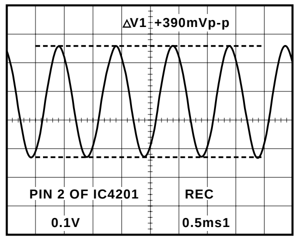
WF75



WF76

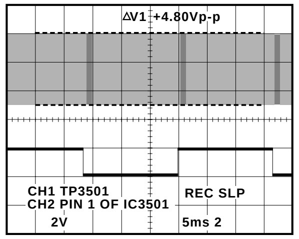


WF77



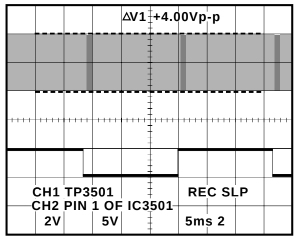
WF81

HEAD AMP C.B.A. (A,B,C,D,G,H)



CH1 WF85
CH2 WF86

HEAD AMP C.B.A. (E,F,I)



CH1 WF87
CH2 WF88

COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
PV-M1349	A
PV-M1359W	B
VV-1309	C
VV-1319W	D
PV-M1369	E
PV-M1379W	F
PV-M2059	G
PV-M2069W	H
PV-M2079	I